

**EFFICACY REVIEW**  
by Mark Suarez, Entomologist - IB

*Mark E. S.*

**DATE:** 29 October 2004

**EPA REG. NUMBER:**

10404-RNA  
10404-RNL  
10404-RNG  
10404-RNT  
10404-RNU

*3 DECEMBER 2004*

**PRODUCT NAME:**

Lesco Cross Check Insecticide 0.10% Plus  
Fertilizer [10404-RNA]  
Lesco Cross Check Insecticide 0.065% Plus  
Fertilizer [10404-RNL]  
Lesco Cross Check Insecticide 0.042% Plus  
Fertilizer[10404-RNG]  
Lesco Cross Check Insecticide 0.03% Plus  
Fertilizer[10404-RNT]  
Lesco Cross Check GC Insecticide 0.065%  
Plus Fertilizer[10404-RNU]

**REGISTRANT:**

10404; Lesco Inc.

**SECONDARY REVIEWER:**

Kevin Sweeney, Senior Entomologist

**PM:**

George LaRocca, PM13

**REVIEWER:**

Olga Odiott

**DECISION #.:**

335339

**DP BARCODE:**

299414

**ACTION:**

165; New Registration; Old Ingredient;  
Minor Change

**ACTIVE INGREDIENT(S):**

128825, Bifenthrin.....0.1%

**TYPE:**

Broadcast fertilizer/Insecticide

**OPPTS GUIDELINE(S):**

810.1000  
810.3000  
810.3100

**MRID:**

46099510

GLP ? : No.

SITES: Lawns (Soil Treatment)

PESTS: Fire Ants (*Solenopsis* spp.)

STUDY APPLICATION RATE: See Table 1

LABEL RATE: See Table 2

Formulation	Application Rate (Kg [AI]/Hectare)
TopPro Granule 0.2%	0.224
TopPro Flowable 7.9	0.448
Talstar EZ Granule 0.2%	0.448
Talstar Flowable 7.9%	0.224

Table 1. Study Application Rates for TopPro Granule 0.2%, TopPro Flowable 7.9%, Talstar EZ Granule 0.2%, and Talstar Flowable 7.9%.

Formulation	% AI(wt)	Label Application Rate (Lb/1000 sq ft)	Limit	Label Application Rate (Lb [AI] /acre)	Kg [AI] /Ha
RNA	0.1	2.3	Upper	0.100211	0.1123
	0.1	4.6	Lower	0.200422	0.2246
RNT	0.03	3.8	Upper	0.049704	0.0557
	0.03	10	Lower	0.130729	0.1465
RNG	0.042	5.2	Upper	0.095125	0.1066
	0.042	10.4	Lower	0.190339	0.2133
RNL, RNU	0.065	3.33	Upper	0.094322	0.1057
	0.065	6.66	Lower	0.188643	0.2114

Table 2. Label Application Rates for 10404-RNA, -RNT, -RNG, -RNL, & -RNU. Converted from pounds product per 1000 square feet to kilograms active ingredient per hectare. Label application rate (lb [AI]/acre) indicated in italics marginally exceeds annual Bifenthrin residential application limit.

#### STUDY SUMMARIES:

The registrant provided data for Bifenthrin based products TopPro Granule 0.2% and TopPro Flowable 7.9% in comparison to the registered, industry standard FMC products Talstar EZ Granule 0.2% and Talstar Flowable 7.9%. The effect on red imported fire ants (*Solenopsis invicta*) was determined as a function of mound vigor and post-treatment mound building activity. Both indices were based upon subjective,



relative observation and rating (0-100) of ant activity. Ant activity was measured prior to treatment and at 7, 14, 21, 28, 42, and 56 days post-treatment. All products performed similarly, with significant reductions in both ant activity categories by 7 days. Activity remained at 0 throughout the 56 day observation period in most instances.

**ENTOMOLOGIST'S COMMENTS AND RECOMMENDATIONS:**

The data submitted in support of the 10404-RNX complex of registrations are deficient with respect to the label claims on the following grounds:

- The submitted data were not generated with the formulation which is the subject of the registration actions.
- The formulations tested were applied at, or above, the highest label rate directed for any product. In three of the four products, the study application rate exceeds the maximum application rate directed on the label of the product. In all cases, the lower limit of product applied as directed on the label is well below the tested application rate (50 to 25% of the tested application rate).
- The protocol for the submitted study did not follow the 810.3100 product performance guidelines. Please consult this guideline for complete details.
- If fire ants data requirements are met, clarify the Directions for Use for fire ant treatments. Instructing the user to combine broadcast application with mound treatments is likely to result in an exceedance of the 0.2 lb AI/acre/year limit placed on residential Bifenthrin application. These directions need to be explicit to prevent combined broadcast and mound treatments that exceed the allowable annual application of Bifenthrin.
- Data were neither cited, nor provided, for two public health pests on the following registrations: 10404-RNA, RNT, RNG, RNL, RNU. . Cite or submit data for, or remove from the label the pests listed below.
  1. Centipedes
  2. Fleas

Enclosure

01404-00RNA S752998-ER